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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,935	03/30/2004	Inyup Kang	030310	7935
23696 7590 09/22/2008 QUALCOMM INCORPORATED 5775 MOREHOUSE DR. SAN DIEGO, CA 92121				
EXAMINER				
NGUYEN, MATTHEW VAN				
ART UNIT		PAPER NUMBER		
2838				
NOTIFICATION DATE		DELIVERY MODE		
09/22/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/814,935

**Applicant(s)**

KANG ET AL.

**Examiner**

MATTHEW V. NGUYEN

**Art Unit**

2838

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 28-34 and 49-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 28-34 and 49-52 is/are allowed.
- 6) ☒ Claim(s) 53 and 54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

1. The disclosure should be carefully reviewed and ensure that any and all grammatical, idiomatic, and spelling or other minor errors are corrected. For instance, in claim 51, line 6, "integrated circuits devices" should be changed -- integrated circuit devices --.

2. Claims 53 and 54 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 53 and 54 are directed to a computer program and do not constitute a statutory process, machine, manufacture or composition of matter. Since a computer program is merely a set of instructions capable of being executed by a computer, the computer program itself is not a process, and is a computer program without the computer-readable medium needed to realize the computer program's functionality. Such a computer program is not a process, machine, manufacture or composition of matter. Thus, a computer program/instructions **must be stored** in a computer readable medium **and executed** by a machine to perform a task. As claimed, the computer "instructions" **are neither stored or are executed**.

3. Claims 28-34 and 49-52 are allowable over prior art of record.

4. The following is an examiner's statement of reasons for allowance: none of prior art of record taken alone or in combination shows a voltage regulation apparatus for use on an integrated circuit device, comprising an automatic process identifier configured to identify a process split of the device, a memory circuit coupled to the automatic process identifier, the memory circuit configured to store data comprising

target voltages for different process splits, a processing unit, a power supply, and a voltage regulator circuit coupled to the memory circuit and to the power supply, the regulator configured to adjust the power supply value according to the automatic process identifier and the memory circuit, the adjusted power supply causing the processing unit to operate substantially at a target frequency as recited in claims 28-34; or an integrated circuit device comprising a processing unit, process identification means for identifying the process split of the integrated circuit, memory means for storing characterization data of the family of integrated circuit devices to which the integrated circuit device belongs, means for determining the characterization data for the integrated circuit device using the memory means and the process identification means, and voltage regulation means for adjusting the supply voltage using the characterization data for the integrated circuit device to achieve a desired target frequency of operation for the processing unit as recited in claims 49 and 50; or a method of dynamic voltage scaling comprising identifying the process split of an integrated circuit, storing characterization data of a family of integrated circuit devices to which the integrated circuit device belongs, determining the characterization data for the integrated circuit device using the stored characterization data of the family of integrated circuit devices and the identified process split of an integrated circuit, and adjusting the supply voltage using the characterization data for the integrated circuit device to achieve a desired target frequency of operation for the processing unit as recited in claims 51 and 52.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW V. NGUYEN whose telephone number is (571)272-2081. The examiner can normally be reached on 8 HOURS M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, AKM ULLAH can be reached on (571)272-2361. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MATTHEW V NGUYEN/  
Primary Examiner, Art Unit 2838